

AIR POLLUTION CONTROL OPERATION PERMIT RENEWAL

EI FACILITY NO: 241021220

OPERATION PERMIT NO.: 241021220-P20

TYPE: Renewal of Part 70 Source Operation Permit No. 241021220-P10

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Mid-America Steel Drum Company

Street Address: 8570 South Chicago Road
Oak Creek, Milwaukee County, Wisconsin

Responsible Official, & Title: Scott Swosinski, Vice President and General Manager

is authorized to operate an existing drum reconditioning facility in conformity with the conditions herein.

This renewed operation permit expires on June 11, 2018 [Section NR 407.09(1)(b)1., Wis. Adm. Code].

A renewal application must be submitted at least 6 months, but not more than 18 months, prior to the expiration date [ss. 285.66(3)(a), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely and complete application for renewal of the permit. If a timely and complete application for renewal is submitted, the existing operation permit will not expire until the renewal application has been finally acted upon by DNR. [§§ 227.51(2), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Milwaukee, Wisconsin

June 11, 2013

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By /s/ Daniel Schramm 06/11/2013

Daniel H. Schramm
Air Management Supervisor

PREAMBLE TO OPERATION PERMIT

An Asterisk (*) throughout this document denotes legal authority, limitations and conditions which are not federally enforceable [Section NR 407.09(3)(b), Wis. Adm. Code.].

Historical Summary of Permits/Orders Issued to the Facility.

The following permits, orders, etc., are adopted, under ss. 285.65(3), Wis. Stats., and NR 407.09(2)(d), Wis. Adm. Code, by Permit 241021220-P20 which then becomes the primary enforceable document:

Permit/Order Number	Issuance Date	Sources Covered & Description ¹	Permits Adopted
Order AM-90-22	November 29, 1990	Established in-line averaging as a method of demonstrating compliance for the coating operations. (P11, P13 & P14).	None
Permit 2410212220-P01	November 11, 2003	Total Facility – Authorized operation of facility as a part 70 Source.	AM-90-2
Permit 2410212220-P10	January 2, 2009	Total Facility – Authorized continued operation of facility as a part 70 source.	2410212220-P01 AM-90-2
Permit 2410212220-P20	June 11, 2013	Total Facility – Authorizes continued operation of facility as a part 70 source.	2410212220-P10 2410212220-P01 AM-90-2

¹ - Total Facility refers to all existing units at the facility at the time of issuance of the permit listed.

Process Description.

Significant Emission Units.

- A. Stack S10, Process P30, Control Unit C30 – Drum Reclamation Furnace (Balboa Pacific), installed in 1995. The furnace replaced a similar unit installed in 1972. The unit consists of a mechanical conveyor belt, combustion chamber and afterburner. The combustion chamber and afterburner are both natural gas-fired. The combustion chamber is equipped with 12 burners, while the afterburner is equipped with 4 burners. The combined fuel burning capacity of the combustion chamber is 19.5 mmBtu/hr, while the combined fuel burning capacity of the afterburner is 6.5 mmBtu/hr. In addition to an afterburner, the entrance to the combustion chamber is equipped with a steam curtain. The exhaust ventilation system to the furnace is constructed so part of the exhaust stream, after the afterburner, can be diverted to a nearby boiler (Waste Heat Boiler). The afterburner and boiler are equipped with separate exhaust stacks. When installed, the department confirmed the installation of the replacement furnace was exempt from needing a construction permit.
- B. Stack S10A, Process B10 – Waste Heat Recovery Boiler. Adjacent to the drum reclamation furnace, located in enclosed room, is a waste heat recovery boiler. The boiler takes a portion of the exhaust gas stream from the afterburner to the furnace and uses the gas stream to produce process steam. Some of the steam is used for the steam curtain on the reclamation furnace. It is estimated, no more than 10% of the exhaust stream from the afterburner is routed to the boiler. The boiler is not equipped with a back-up fuel or has the ability to use a fossil fuel to heat the boiler. The exhaust gases used by the boiler separately ventilate outside the room from an exhaust stack attached to the boiler.
- C. Stack S13, Process P33, Control Unit C33 – Interior (Epoxy) Drum Coating Line, installed in 1972. Associated with the line are two spray booths (drum and lid), a conveying line and a curing oven (475°F). Various types of coatings can be applied, but most coatings are water based. The booths are equipped with automatic, air assisted airless lances. The lance for the lid spray booth has four spray nozzles and the lance for the drum spray booth has nine spray nozzles. The booths are equipped with fiberglass filters. The two booths share the same natural gas-fired curing oven (2.0 mmBtu/hr). The booths and oven separately ventilate outside the building from fixed,

exhaust stacks.

Stack S14, Process P34, Control Unit C34 – Exterior Drum Coating Line, installed in 1972. Associated with the line are two spray booths (drum and lid), a conveying line, and drying oven (275°F - 300°F). An assortment of air-dried and water based coatings are applied. The booths are equipped with three (3) air assisted airless guns. The booths are equipped with fiberglass filters. The two booths share the same natural gas-fired drying oven (1.25 mmBtu/hr). The booths and oven separately ventilate outside the building from fixed exhaust stacks.

- D. Stack S17 (fugitive), Process P37 – Drum Ring Dip Tank, installed in 1972. There are two paint pots. The rings are manually dipped into the paint, removed, and placed on drying racks. The excess paint is collected and returned to the paint pots. A single air-dried coating is applied. The openings to the paint pots are partially covered. The emissions from the operation are released inside the building. There is no drying oven or exhaust stack.

Insignificant Emission Units.

Maintenance of Grounds, Equipment and Buildings
Boiler, Turbine and HVAC System Maintenance
Pollution Control Equipment Maintenance
Internal Combustion Engines Used for Warehousing and Material Transport
Fire Control Equipment
Janitorial Activities
Office Activities
Convenience Water Heating
Convenience Space Heating (< 5 million BTU/hr Burning Gas, Liquid, or Wood)
Sanitary Sewer and Plumbing Venting

Caustic Cleaning Lines (Process P31)
Three (3) Sand Blasting Machines (Process P32), exhausts indoors

Permit Shield. Unless precluded by the Administrator of the US EPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

None.

Part I - The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant - This area will note which pollutant is being regulated by the permit.

Limitations - This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration - The compliance demonstration methods outlined in this area may be used to demonstrate compliance with the associated emission limit or work practice standard listed under the corresponding **Limitations** column. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to ensure compliance with the

limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a source is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements - Specific US EPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment shall meet, at a minimum, the requirements of s. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

Condition Type - This area will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions - Specific conditions usually applicable to the entire facility or compliance requirements.

PART II - This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

Part I

A. Stack S10, Process P30, Control Unit C30 – Drum Reclamation Furnace (Balboa Pacific), installed in 1995.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM)	<p>(1) Particulate matter emissions may not exceed 3.3 pounds per hour from Stack S10. [s. 285.65(3), Wis. Stats., and ss. NR 415.05(1)(o) and NR 404.08(2), Wis. Adm. Code]</p> <p>(2) Stack S10 shall have the following stack parameters:¹</p> <p>(a) The stack height shall be at least 40 feet above ground level;</p> <p>(b) The equivalent stack inside diameter at the outlet may not exceed 4.76 feet; and</p> <p>(c) This stack may not be equipped with a rainhat or other device that will impede upward momentum of the exhaust gas. [s. 285.65(3), Wis. Stats., and ss. NR 404.04 and NR 407.09(2)(d)3., Wis. Adm. Code (241021220-P10)]</p>	<p>(1) The permittee shall operate the afterburner at all times when the drum reclamation furnace is operating. When visible emissions are observed exiting the furnace, the permittee shall operate the steam curtain to reduce emissions. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> <p>(2) When the drum reclamation furnace is operating, the permittee shall maintain the operating setpoint temperature of the afterburner at or above 1650°F and monitor the combustion temperature of the afterburner. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> <p>(3) The permittee shall annually inspect the operational condition and integrity of the afterburner and verify all relevant interlocks with the process. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> <p>(4) The furnace shall be operated and maintained in accordance with the manufacturer's recommendations. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> <p>(5) The permittee shall determine the physical parameters of the exhaust stack. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p>	<p>(1) <i>Reference Test Method for Particulate Matter Emissions:</i> When particulate matter emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (USEPA Method 202). [ss. NR 407.09(1)(c)1. and NR 439.06(1), Wis. Adm. Code]</p> <p>(2) <i>Reference Test Method for PM10 Emissions:</i> When PM10 emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 201 or 201A. [ss. NR 407.09(1)(c)1. and NR 439.06(1m), Wis. Adm. Code]</p> <p>(3) The permittee shall monitor and record the temperature in the primary chamber of the afterburner at least once every 15 minutes. [ss. NR 407.09(1)(c)1., NR 439.04(1)(d), NR 439.055(1)(d) and NR 439.055(6), Wis. Adm. Code]</p> <p>(4) The permittee shall maintain a log for the control device and monitoring equipment detailing all routine and non-routine maintenance, including monitoring equipment calibrations, performed and including dates and duration of any outages. This log shall be used to document all inspections required under I.ZZZ.2.b.(2). [ss. NR 407.09(1)(c)1., NR 439.04(a)3.b. and NR 439.04(1)(d), Wis. Adm. Code]</p>

¹ These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated.

A. Stack S10, Process P30, Control Unit C30 – Drum Reclamation Furnace (Balboa Pacific), installed in 1995.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			<p>(5) The permittee shall keep records of the manufacturer's recommendations regarding operation and maintenance of the furnace. [ss. NR 407.09(1)(c)1. and s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(6) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the exhaust stack's physical parameters. [ss. NR 407.09(1)(c)1. and NR 439.04(1)(d), Wis. Adm. Code]</p>
2. Visible Emissions (VE)	(1) No owner or operator of direct source may cause or allow emissions of shade or density greater than number 1 of the Ringlemann chart or 20%. [ss. NR 431.05, Wis. Adm. Code]	(1) The requirements in I.A.1.b.(1)-(4) shall be used to demonstrate compliance. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]	<p>(1) <i>Reference Test Method for Visible Emissions:</i> When visible emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 9. [ss. NR 407.09(1)(c)1. and NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The monitoring and recordkeeping requirements in I.A.1.c.(3)-(5) shall be used to demonstrate compliance. [ss. NR 407.09(1)(c)1. and NR 407.09(1)(c)1.b., Wis. Adm. Code]</p>
3. Volatile Organic Compound (VOC)	(1) Process lines on which construction or modification commenced on or after August 1, 1979, and which are not subject to emission limitations listed elsewhere in chs. NR 419 to NR 423 shall control volatile organic compound emissions by at least 85%. [s. NR 424.03(2)(b), Wis. Adm. Code]	(1) The requirements in I.A.1.b.(1)-(4) shall be used to demonstrate compliance. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]	<p>(1) <i>Reference Test for Volatile Organic Compound Emission Rates:</i> When emission testing of volatile organic compound (VOC) emission concentrations or emission rates is required to demonstrate compliance, the permittee shall use USEPA Method 18, 25, 25A or 25B. [ss. NR 407.09(1)(c)1. and NR 439.06(3)(a), Wis. Adm. Code]</p> <p>(2) The monitoring and recordkeeping</p>

A. Stack S10, Process P30, Control Unit C30 – Drum Reclamation Furnace (Balboa Pacific), installed in 1995.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			requirements in I.A.1.c.(3)-(5) shall be used to demonstrate compliance. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code]
4. NR 445 State Hazardous Air Pollutants (State HAP)	Refer to I.ZZZ.1.a. of the permit for applicable limitations	Refer to I.ZZZ.1.b. of the permit for compliance demonstration requirements	Refer to I.ZZZ.1.c. of the permit for reference test methods, recordkeeping, monitoring, and reporting requirements.

B. Stack S10A, Process B10 – Waste Heat Recovery Boiler.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Particulate Matter (PM)	<p>(1) Particulate matter emissions may not exceed 0.2 pounds per hour from Stack S10A. [s. 285.65(3), Wis. Stats., and ss. NR 415.05(1)(o) and NR 404.08(2), Wis. Adm. Code]</p> <p>(2) Stack S10A shall have the following stack parameters:²</p> <p>(a) The stack height shall be at least 25.6 feet above ground level;</p> <p>(b) The equivalent stack inside diameter at the outlet may not exceed 1.08 feet; and</p> <p>(c) This stack may not be equipped with a rainhat or other device that will impede upward momentum of the exhaust gas. [s. 285.65(3), Wis. Stats., and ss. NR 404.04 and NR 407.09(2)(d)3., Wis. Adm. Code (241021220-P10)]</p>	<p>(1) This boiler shall be operated and maintained in accordance with the manufacturer's recommendations. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> <p>(2) The permittee shall determine the physical parameters of the exhaust stack. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p>	<p>(1) <i>Reference Test Method for Particulate Matter Emissions:</i> When particulate matter emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (USEPA Method 202). [ss. NR 407.09(1)(c)1. and NR 439.06(1), Wis. Adm. Code]</p> <p>(2) <i>Reference Test Method for PM10 Emissions:</i> When PM10 emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 201 or 201A. [ss. NR 407.09(1)(c)1. and NR 439.06(1m), Wis. Adm. Code]</p> <p>(3) The permittee shall keep records of the manufacturer's recommendations regarding operation and maintenance of the boiler. [ss. NR 407.09(1)(c)1. and NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the exhaust stack's physical parameters. [ss. NR 407.09(1)(c)1. and NR 439.04(1)(d), Wis. Adm. Code]</p>
2. Visible Emissions (VE)	<p>(2) No owner or operator of direct source may cause or allow emissions of shade or density greater than number 1 of the Ringlemann chart or 20%. [ss. NR 431.05, Wis. Adm. Code]</p>	<p>(1) The requirement in I.B.1.b.(1) shall be used to demonstrate compliance. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p>	<p>(1) <i>Reference Test Method for Visible Emissions:</i> When visible emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 9. [ss. NR 407.09(1)(c)1. and NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The monitoring and recordkeeping requirement in I.B.1.c.(3) shall be used to demonstrate compliance. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code]</p>

²These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated.

**C. Stack S13 A, B & C, Process P33, Control Unit C33 – Interior (Epoxy) Drum Coating Line, installed in 1972.
Stack S14 A, B & C, Process P34, Control Unit C34 – Exterior Drum Coating Line, installed in 1972.**

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compounds (VOC)	<p>(1) No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent spillage, escape or emissions of organic compounds, solvents or mixtures. Such precautions shall include, but are not limited to the transfer and storage of VOC containing materials (e.g., coatings, cleaning agents and contaminated rags) in closed/covered containers. [ss. NR 419.03(2) and NR 419.04, Wis. Adm. Code (General limitation)]</p> <p>(2) No owner or operator of a miscellaneous metal parts or products coating line using a baked or specially cured coating technology may cause, allow or permit the emission of any VOCs in excess of 0.42 kilograms per liter (3.5 pounds per gallon) of coating, excluding water, delivered to a coating applicator. [s. NR 422.15(2)(b), Wis. Adm. Code]</p> <p>(3) No owner or operator of a miscellaneous metal parts or products coating line using an air dried coating technology may cause, allow or permit the emission of any VOCs in excess of 3.5 pounds of VOC per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator. [s. NR 422.15(3)(b)&(c), Wis. Adm. Code]</p>	<p>(1) The permittee shall establish and implement operating procedures that take reasonable precautions to prevent the spillage, escape or emission of organic compounds from the handling, transfer, storage and disposal of VOC containing materials (e.g., coatings, cleaning agents and contaminated rags). The operating procedures shall include, but not be limited to, the storage of VOC containing materials in closed/covered containers. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> <p>(2) The permittee shall uniquely indentify and determine the VOC content of each coating and cleaning agent applied or used using either USEPA Test Method 24, Material Safety Data Sheet, or another equivalent form of document. The VOC contents shall be determined in units of measurement sufficient to demonstrate compliance. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code]</p> <p>(3) The permittee shall use one of the following methods to demonstrate compliance with the emission limitations in Sections I.C.1.a.(2) and (3):</p> <p>(a) The application of only coatings with VOC contents at or below the allowable emission limitation OR</p> <p>(b) The usage of coatings with a daily volume-weighted average VOC content at or below the allowable emission limitation (i.e., in-line averaging). [ss. NR 407.09(4)(a)3.b. and NR 422.04(1) and (2)(a), Wis. Adm. Code]</p>	<p>(1) <i>Reference Test for Volatile Organic Compound Emission Rates:</i> When emission testing of volatile organic compound (VOC) emission concentrations or emission rates is required to demonstrate compliance, the permittee shall use USEPA Method 18, 25, 25A or 25B. [ss. NR 407.09(1)(c)1. and NR 439.06(3)(a), Wis. Adm. Code]</p> <p>(2) <i>Reference Test for Volatile Organic Compound Content:</i> When emission testing of volatile organic compound (VOC) content is required to demonstrate compliance, the permittee shall use USEPA Method 24 or 24A. [ss. NR 407.09(1)(c)1. and NR 439.06(3)(b), Wis. Adm. Code]</p> <p>(3) The permittee shall establish procedures that take reasonable precautions to prevent the spillage, escape or emission of organic compounds from the handling, transportation, storage and disposal of VOC containing materials (e.g., coatings, cleaning agents and contaminated rags). These procedures shall include, but are not limited to, the storage of VOC containing materials in closed/covered containers. [ss. NR 407.09(1)(c)1 and NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall keep at least weekly records of the following information sufficient to demonstrate daily compliance:</p> <p>(a) The identity of each coating applied or</p>

**C. Stack S13 A, B & C, Process P33, Control Unit C33 – Interior (Epoxy) Drum Coating Line, installed in 1972.
Stack S14 A, B & C, Process P34, Control Unit C34 – Exterior Drum Coating Line, installed in 1972.**

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	<p>(4) All VOC emissions from solvent washings shall be considered in the emission limitations above unless the used wash solvent is directed into containers that prevent evaporation into the atmosphere. [s. NR 422.15(8), Wis. Adm. Code]</p>	<p>(4) In-line averaging. No owner or operator of a coating line subject to an emission limitation contained in s. NR 422.15 and complying with the emission limitation by means of in-line averaging may cause, allow or permit the daily volume-weighted average VOC content to exceed the emission limitation to which the coatings are subject. The daily volume-weighted average VOC content shall be calculated by using the following equation:</p> $VOC_A = \left[\sum_{i=1}^n C_i V_i \right] / V_T$ <p>where:</p> <p>VOC_A is the volume-weighted average VOC content of 2 or more coatings applied on a coating line during any day in kilograms per liter (pounds per gallon) of coating, excluding water</p> <p>i is the subscript denoting an individual coating</p> <p>n is the number of different coatings subject to the same numerical emission limitation applied during any day on a coating line</p> <p>C_i is the VOC content of each coating (i) as applied during any day on the coating line in kilograms per liter (pounds per gallon) of coating, excluding water</p> <p>V_i is the volume of each coating (i), excluding water, as applied during any day on the coating line in liters (gallons)</p> <p>V_T is the total volume of all n coatings subject to the same emission limitation, excluding water, applied during any day on the coating line in liters (gallons)</p> <p>[ss. NR 407.09(4)(a)3.b. and NR 422.04(1)(a), Wis. Adm. Code]</p>	<p>used (Each material used or applied shall be identified with a unique identification number and/or name).</p> <p>(b) The VOC content of each coating, as applied, in units of pounds per gallon (kilograms per liter), excluding water. The VOC content shall be determined either analytically or using manufacturers literature (e.g., MSDSs). If published literature is used to determine the material's VOC content and the literature specifies a range of values, the permittee shall record and use the worst case value when determining compliance. If published literature is used and the material is compounded or thinned, the permittee shall use a mass balance calculation to determine the material's worst case VOC content. All VOC emissions from solvent washings shall be considered in the emission limitations above unless the used wash solvent is directed into containers that prevent evaporation into the atmosphere. [ss. NR 407.09(1)(c)1. and NR 439.04(1)(d) and (5)(a), Wis. Adm. Code]</p> <p>(5) When in-line averaging is used to demonstrate compliance, the permittee shall, in addition to recordkeeping requirements in NR 439.04(5)(a), Wis. Adm. Code (Section I.C.1.c.(4), above), collect and record the following information for each day of operation for each affected line:</p> <p>(a) The name or identification number of each coating applied on each coating line.</p>

**C. Stack S13 A, B & C, Process P33, Control Unit C33 – Interior (Epoxy) Drum Coating Line, installed in 1972.
Stack S14 A, B & C, Process P34, Control Unit C34 – Exterior Drum Coating Line, installed in 1972.**

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
		(5) If cleanup solvents are not directed into containers that prevent evaporation into the atmosphere, the permittee shall determine the amounts used on a daily basis and include the VOC emissions when determining compliance with the emission limitations in Sections I.C.1.a.(2) and (3): [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]	(b) The volume of each coating applied in gallons (liters), excluding water. (c) The daily volume-weighted average VOC content of all coatings applied on each coating line as defined in s. NR 422.04(1)(a), Wis. Adm. Code, in units of pounds per gallon (kilograms per liter), excluding water. The permittee may elect to define a “coating line” to include more than one coating line, if the product being manufactured is coated on more than one line subject to in-line averaging. [ss. NR 407.09(1)(c)1., NR 422.04(1)(a), NR 439.04(1)(d) and NR 439.04(5)(g)1., Wis. Adm. Code]
2. Particulate Matter (PM)	(1) The permittee may not cause, allow or permit the emissions of particulate matter to exceed the allowable emissions calculated using the equation $E = 3.59 P^{0.62}$ For process weight rates up to 60,000 pounds per hour, where E is the allowable emissions in pounds per hour and p is the process weight rate in tons per hour. If the calculated rate is less restrictive than the applicable concentration specified under s. NR 415.05(1), Wis. Adm. Code (0.40 pounds of particulate matter per 1,000 pounds of gas), based on the maximum exhaust flow rate and normal exhaust gas temperature, this limitation shall apply. [s. NR 415.05(2), Wis. Adm. Code]	(1) Each spray booth shall be equipped with an overspray filter to control particulate matter emissions. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code] (2) The overspray filters shall be in use whenever coating is being applied inside the confines of a spray booth. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code] (3) The permittee shall visually inspect the placement and condition of filters at the beginning of each day. The filter media shall completely cover the inlets to the exhaust vents. Overloaded filters should be replaced. If the spray booth is not used on a particular day, daily inspection of its filters is not required. [ss. NR 407.09(4)(a)3.b. and NR 439.055(6), Wis. Adm. Code] (4) The permittee shall determine the physical	(1) <i>Reference Test Method for Particulate Matter Emissions:</i> When particulate matter emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (USEPA Method 202). [ss. NR 407.09(1)(c)1. and NR 439.06(1), Wis. Adm. Code] (2) <i>Reference Test Method for PM10 Emissions:</i> When PM10 emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 201 or 201A. [ss. NR 407.09(1)(c)1. and NR 439.06(1m), Wis. Adm. Code] (3) The permittee shall maintain a log of the daily inspections performed for each booth. Each inspection shall record the following

**C. Stack S13 A, B & C, Process P33, Control Unit C33 – Interior (Epoxy) Drum Coating Line, installed in 1972.
Stack S14 A, B & C, Process P34, Control Unit C34 – Exterior Drum Coating Line, installed in 1972.**

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
	<p>(2) Particulate matter emissions may not exceed the following emission rate in units of pounds per hour:³ i) S13A - 0.003, ii) S13B – 0.008. iii) S13C – 0.015. iv) S14A - 0.008, v) S14B - 0.008. vi) S14C – 0.009. [s. NR 415.05(1)(o) and NR 404.08(2), Wis. Adm. Code]</p> <p>(3) The stack heights shall be at least the following feet above ground level:³ i) S13A – 27.2, ii) S13B – 28.8. iii) S13C – 29.5. iv) S14A – 24.9, v) S14B – 24.9. vi) S14C – 24.9. [s. 285.65(3), Wis. Stats., and ss. NR 404.04 and NR 407.09(2)(d)3., Wis. Adm. Code (241021220-P10)]</p> <p>(4) Stacks S13A, S13B and S13C may not be equipped with rainhats or other devices that impede the upward momentum of exhaust gases. [s. 285.65(3), Wis. Stats., and ss. NR 404.04 and NR 407.09(2)(d)3., Wis. Adm. Code (241021220-P10)]</p>	<p>parameters of the exhaust stacks. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p>	<p>information:</p> <p>(a) The date and time of the inspection.</p> <p>(b) The operational status of spray booth.</p> <p>(c) The placement and condition of the filter.</p> <p>(d) The signature or initials of the person performing the inspection.</p> <p>If a spray booth is not used on a particular day, a daily inspection of the booth is not required. Instead, the permittee shall record the spray booth was not used and the date(s) the spray booth was not used. The permittee may wait until the spray booth becomes operational again before recording this information. [ss. NR 407.09(1)(c)1., NR 439.04(1)(a) & (d) and NR 439.055(2)(b), Wis. Adm. Code]</p> <p>(4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the exhaust stacks' physical parameters. [ss. NR 407.09(1)(c)1. and NR 439.04(1)(d), Wis. Adm. Code]</p>
3. Visible Emissions (VE)	<p>(1) No owner or operator of direct source may cause or allow emissions of shade or density greater than number 1 of the Ringlemann chart or 20%. [ss. NR 431.05, Wis. Adm. Code]</p>	<p>(1) The requirements in I.C.1.b.(1)-(3) shall be used to demonstrate compliance. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p>	<p>(1) <i>Reference Test Method for Visible Emissions:</i> When visible emission testing is required to demonstrate compliance, the permittee shall use USEPA Method 9. [ss. NR 407.09(1)(c)1. and NR 439.06(9)(a)1., Wis. Adm. Code]</p> <p>(2) The monitoring and recorkeeping requirements in I.A.1.c.(3) shall be used to demonstrate compliance. [s. NR</p>

³These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated.

**C. Stack S13 A, B & C, Process P33, Control Unit C33 – Interior (Epoxy) Drum Coating Line, installed in 1972.
Stack S14 A, B & C, Process P34, Control Unit C34 – Exterior Drum Coating Line, installed in 1972.**

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			407.09(1)(c)1.b., Wis. Adm. Code]
4. Hazardous Air Pollutants (HAP)	Refer to I.E. and I.ZZZ.1.a. of the permit for applicable limitations	Refer to I.E. and I.ZZZ.1.b. of the permit for compliance demonstration requirements	Refer to I.E. and I.ZZZ.1.c. of the permit for reference test methods, recordkeeping, monitoring, and reporting requirements.

D. Stack S17 (fugitive), Process P37 – Drum Ring Dip Tank, installed in 1972.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
1. Volatile Organic Compound (VOC)	<p>(1) No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent spillage, escape or emissions of organic compounds, solvents or mixtures. Such precautions shall include, but are not limited to the transfer and storage of VOC containing materials (e.g., coatings, cleaning agents and contaminated rags) in closed/covered containers. [ss. NR 419.03(2) and NR 419.04, Wis. Adm. Code (General limitation)]</p> <p>(2) No owner or operator of a miscellaneous metal parts or products coating line using an air dried coating technology may cause, allow or permit the emission of any VOCs in excess of 3.5 pounds of VOC per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator. [s. NR 422.15(3)(b)&(c), Wis. Adm. Code]</p> <p>(3) All VOC emissions from solvent washings shall be considered in the emission limitations above unless the used wash solvent is directed into containers that prevent evaporation into the atmosphere. [s. NR 422.15(8), Wis. Adm. Code]</p>	<p>(1) The permittee shall establish and implement operating procedures that take reasonable precautions to prevent the spillage, escape or emission of organic compounds from the handling, transfer, storage and disposal of VOC containing materials (e.g., coatings, cleaning agents and contaminated rags). The operating procedures shall include, but not be limited to, the storage of VOC containing materials in closed/covered containers. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> <p>(2) The permittee shall uniquely identify and determine the VOC content of each coating and cleaning agent applied or used using either USEPA Test Method 24, Material Safety Data Sheet, or another equivalent form of document. The VOC contents shall be determined in units of measurement sufficient to demonstrate compliance. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code]</p> <p>(3) The permittee shall use apply coatings with VOC contents at or below the allowable emission limitation. [ss. NR 407.09(4)(a)3.b. and NR 422.04(2)(a), Wis. Adm. Code]</p> <p>(4) If cleanup solvents are not directed into containers that prevent evaporation into the atmosphere, the permittee shall determine the amounts used on a daily basis and include the VOC emissions when determining compliance with the emission limitations in Section I.D.1.a.(2). [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p>	<p>(1) <i>Reference Test for Volatile Organic Compound Content:</i> When emission testing of volatile organic compound (VOC) content is required to demonstrate compliance, the permittee shall use USEPA Method 24 or 24A. [ss. NR 407.09(1)(c)1 and NR 439.06(3)(b), Wis. Adm. Code]</p> <p>(2) The permittee shall establish procedures that take reasonable precautions to prevent the spillage, escape or emission of organic compounds from the handling, transportation, storage and disposal of VOC containing materials (e.g., coatings, cleaning agents and contaminated rags). These procedures shall include, but are not limited to, the storage of VOC containing materials in closed/covered containers. [ss. NR 407.09(1)(c)1. and NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall keep at least weekly records of the following information sufficient to demonstrate daily compliance:</p> <ul style="list-style-type: none"> (a) The identity of each coating applied or used (Each material used or applied shall be identified with a unique identification number and/or name). (b) The VOC content of each coating, as applied, in units of pounds per gallon (kilograms per liter), excluding water. The VOC content shall be determined either analytically or using manufacturers literature (e.g., MSDSs). If published literature is used to determine the material's VOC content and the literature specifies a range of values, the permittee shall record and use the worst case value

D. Stack S17 (fugitive), Process P37 – Drum Ring Dip Tank, installed in 1972.

Pollutant	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Recordkeeping and Monitoring Requirements
			<p>when determining compliance. If published literature is used and the material is compounded or thinned, the permittee shall use a mass balance calculation to determine the material's worst case VOC content. All VOC emissions from solvent washings shall be considered in the emission limitations above unless the used wash solvent is directed into containers that prevent evaporation into the atmosphere.</p> <p>[ss. NR 407.09(1)(c)1. and NR 439.04(1)(d) and (5)(a), Wis. Adm. Code]</p>
2. Hazardous Air Pollutants (HAP)	Refer to I.E. and I.ZZZ.1.a. of the permit for applicable limitations	Refer to I.E. and I.ZZZ.1.b. of the permit for compliance demonstration requirements	Refer to I.E. and I.ZZZ.1.c. of the permit for reference test methods, recordkeeping, monitoring, and reporting requirements.

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
1. Emission Limits Federal Hazardous Air Pollutants (Federal HAPs)	<p>(1) For an existing⁴ affected source, you shall limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in (a) to (e), except as specified in Condition 2.a.(4).</p> <p>(a) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.31 kg of organic HAP per liter (2.6 lb/gallon) of coating solids used during each 12-month compliance period.</p> <p>(b) For each existing high performance coating affected source, limit organic HAP emissions to no more than 3.3 kg of organic HAP per liter (27.5 lb/gallon) of coating solids used during each 12-month compliance period.</p> <p>(c) For each existing magnet wire coating affected source, limit organic HAP emissions to no more than 0.12 kg of organic HAP per liter (1.0 lb/gallon) of coating solids used during each 12-month compliance period.</p> <p>(d) For each existing rubber-to-metal coating affected source, limit organic HAP emissions to no more than 4.5 kg of organic HAP per liter (37.7 lb/gallon) of coating solids used during each 12-month compliance period.</p> <p>(e) For each existing extreme performance fluoropolymer coating affected source, limit organic HAP emissions to no more than 1.5 kg of organic HAP per liter (12.4 lb/gallon) of coating solids used during each 12-month compliance period.</p> <p>[s. NR 465.43(1)(b), Wis. Adm. Code; 40 CFR 63.3890(b)]</p>

⁴ Existing means initial startup before 8/13/2002. An affected source is a new affected source if it commenced construction after August 13, 2002 and the construction is of a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products surface coating facility had existed.

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart M]**

CONDITION TYPE	a. CONDITIONS
2. Compliance Options	<p>(1) You shall include all coatings, thinners and other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Condition 1.a.(1). To make this determination, you shall use at least one of the compliance options listed in Conditions 2.a.(2) and (3). You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you shall document this switch as required by Condition 5.a.(1)(c), and you shall report it in the next semiannual compliance report required in Condition 4. [s. NR 465.43(2), Wis. Adm. Code; 40 CFR 63.3891]</p> <p>(2) <i>Compliant material option.</i> You shall meet all the requirements of s. NR 465.46 to demonstrate compliance with the applicable emission limit in Condition 1.a.(1) using this option. To use this option, you shall demonstrate that the organic HAP content of each coating used in the coating operation or operations is less than or equal to the applicable emission limit in Condition 1.a.(1), and that each thinner and other additive, and cleaning material used contains no organic HAP. [s. NR 465.43(2)(a), Wis. Adm. Code; 40 CFR 63.3891(a)]</p> <p>(3) <i>Emission rate without add-on controls option.</i> You shall meet all the requirements of s. NR 465.47 to demonstrate compliance with the emission limit in Condition 1.a.(1) using this option. To use this option, you shall demonstrate that, based on the coatings, thinners and other additives, and cleaning materials used in the coating operation or operations, the organic HAP emission rate for the coating operation or operations is less than or equal to the applicable emission limit in Condition 1.a.(1), calculated as a rolling 12-month emission rate and determined on a monthly basis. [s. NR 465.43(2)(b), Wis. Adm. Code; 40 CFR 63.3891(b)]</p> <p>(4) <i>Predominant activity or facility-specific emission limit option.</i> If the surface coating operations are subject to more than one of the subcategory emission limits specified in Condition 1.a.(1), you may comply separately with each subcategory emission limit or comply using one of the alternatives in s. NR 465.43(1)(c)1. or 2. [s. NR 465.43(1)(c), Wis. Adm. Code; 40 CFR 63.3890(c)]</p>
3. General Compliance Requirements	<p>(1) Any coating operation for which you use the compliant material option or the emission rate without add-on controls option shall be, as specified in s. NR 465.43 (2) (a) and (b), in compliance with the emission limit in Condition 1.a.(1) at all times. [s. NR 465.44(1)(a)1., Wis. Adm. Code; 40 CFR 63.3900(a)(1)]</p> <p>(2) You shall always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this section, according to the provisions in s. NR 460.05 (4) (a)1, Wis. Adm. Code. [s. NR 465.44(1)(b), Wis. Adm. Code; 40 CFR 63.3900(b)]</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart M]**

CONDITION TYPE	a. CONDITIONS
4. Reports	<p>(1) <i>Semiannual compliance reports.</i> You shall submit semiannual compliance reports for each affected source according to the requirements of (a) to (f).</p> <p>(a) <i>'Dates.'</i> You shall submit the first and subsequent compliance reports on the dates specified in Condition ZZZ.4.b.(1).</p> <p>(b) <i>'Inclusion with Title V report.'</i> You shall report all deviations in the semiannual monitoring report required by Condition ZZZ.4.a.(1). If you submit a semiannual compliance report pursuant to this Condition along with, or as part of, the semiannual monitoring report required by Condition ZZZ.4.a.(1), and the semiannual compliance report includes all required information concerning deviations from the emission limit in Condition 1.a.(1), its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the Department.</p> <p>(c) <i>'General requirements.'</i> The semiannual compliance report shall contain the information specified in (i) to (vii), and the information specified in (d) to (f) that is applicable to your affected source.</p> <p>(i) Company name and address.</p> <p>(ii) Statement by a responsible official with that official's name, title and signature, certifying the truth, accuracy and completeness of the content of the report.</p> <p>(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. The information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.</p> <p>(iv) Identification of the compliance option or options specified in Condition 2. that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you shall report the beginning and ending dates for each option you used.</p> <p>(v) If you used the emission rate without add-on controls option in Condition 2.a.(3), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.</p> <p>(vi) If you used the predominant activity alternative in Condition 2.a.(4), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.</p> <p>(vii) If you used the facility-specific emission limit alternative in Condition 2.a.(4), include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period.</p> <p>(d) <i>'No deviations.'</i> If there were no deviations from the emission limit in Condition 1.a.(1), the semiannual compliance report shall include a statement that there were no deviations from the emission limits during the reporting period.</p> <p>(e) <i>'Deviations: compliant material option.'</i> If you used the compliant material option in Condition 2.a.(2), and there was a deviation from the applicable organic HAP content requirement in Condition 1.a.(1), the semiannual compliance report shall contain the information in (i) to (iv).</p> <p>(i) Identification of each coating used that deviated from the emission limit in Condition 1.a.(1), and each thinner and other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.</p> <p>(ii) The calculation of the organic HAP content, using Equation 2 of Condition 6.2.(c), for each coating identified in (i). You do not need to submit background data supporting this calculation, such as information provided by coating suppliers or manufacturers, or test reports.</p> <p>(iii) The determination of mass fraction of organic HAP for each thinner and other additive, and cleaning material identified in (i). You do not need to submit background data supporting this calculation, such as information provided by material suppliers or manufacturers, or test reports.</p> <p>(iv) A statement of the cause of each deviation.</p>

[Continued on Next Page]

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
4. Reports (Continued)	<p>(1) <i>Semiannual compliance reports.</i> [Continued]</p> <p>(f) <i>'Deviations: emission rate without add-on controls option.'</i> If you used the emission rate without add-on controls option in Condition 2.a.(3) and there was a deviation from the emission limit in Condition 1.a.(1), the semiannual compliance report shall contain the information in (i) to (iii).</p> <p>(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the emission limit in Condition 1.a.(1)</p> <p>(ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You shall submit the calculations for Equations 1, 1A to 1C, 2, and 3 of Condition 7.a.(2); and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Condition 7.a.(2)(e)(ii). You do not need to submit background data supporting these calculations, such as information provided by materials suppliers or manufacturers, or test reports.</p> <p>(iii) A statement of the cause of each deviation.</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
5. Records	<p>(1) You shall collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.</p> <p>(a) A copy of each notification and report that you submitted to comply with this subchapter, and the documentation supporting each notification and report. If you are using the predominant activity alternative under Condition 2.a.(4), you shall keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under Condition 2.a.(4), you shall keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You shall also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.</p> <p>(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density or volume fraction of coating solids, you shall keep a copy of the complete test report. If you used information provided to you by the manufacturer or supplier of the material that was based on testing, you shall keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.</p> <p>(c) For each compliance period, the records specified in (i) to (iii):</p> <p>(i) A record of the coating operations on which you used each compliance option in Condition 2. and the time periods, beginning and ending dates and times, for each option you used.</p> <p>(ii) For the compliant material option in Condition 2.a.(2), a record of the calculation of the organic HAP content for each coating, using Equation 2 of Condition 6.a.(2).</p> <p>(iii) For the emission rate without add-on controls option in Condition 2.a.(3), a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and other additives, and cleaning materials used each month using Equations 1 and 1A to 1C and 2 of Condition 7.a.(2) and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to Condition 7.a.(2) (e)(ii); the calculation of the total volume of coating solids used each month using Equation 2 of Condition 7.a.(2); and the calculation of each 12-month organic HAP emission rate using Equation 3 of Condition 7.a.(2).</p> <p>(d) A record of the name and volume of each coating, thinner and other additive, and cleaning material used during each compliance period. If you are using the compliant material option in Condition 2.a.(2) for all coatings at the source, you may maintain purchase records for each material used rather than a record of the volume used.</p> <p>(e) A record of the mass fraction of organic HAP for each coating, thinner and other additive, and cleaning material used during each compliance period unless the material is tracked by weight.</p> <p>(f) A record of the volume fraction of coating solids for each coating used during each compliance period.</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart M]**

CONDITION TYPE	a. CONDITIONS
5. Records (Continued)	<p>(1) [Continued]</p> <p>(g) If you use the emission rate without add-on controls option in Condition 2.a.(3), the density for each coating, thinner, other additive and cleaning material used during each compliance period.</p> <p>(h) If you use an allowance in Equation 1 of Condition 7.a.(2) for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to Condition 7.a.(2) (e)(ii), you shall keep records of the information specified in (i) to (iii).</p> <p>(i) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of Condition 7.a.(2); a statement of which subparts under 40 CFR parts 262, 264, 265 and 266 apply to the facility; and the date of each shipment.</p> <p>(ii) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of Condition 7.a.(2).</p> <p>(iii) The methodology used in accordance with Condition 7.a.(2)(e)(ii) to determine the total amount of waste materials sent to or the amount collected, stored and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. You shall include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring and supporting calculations and documentation, including the waste manifest for each shipment.</p> <p>(i) You shall keep records of the date, time and duration of each deviation.</p> <p>[s. 465.45(3), Wis. Adm. Code; 40 CFR 63.3930]</p> <p>(2) Your records shall be in a form suitable and readily available for expeditious review, according to s. NR 460.09 (2) (a). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.</p> <p>(a) You shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record.</p> <p>(b) You shall keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report or record. You may keep the records off-site for the remaining 3 years.</p> <p>[s. NR 465.45(4), Wis. Adm. Code; 40 CFR 63.3931]</p>
6. Compliance Requirements for the Compliant Material Option	<p>(1) You shall complete the initial compliance demonstration for the initial compliance period according to the requirements in (2). The initial compliance period begins on January 2, 2007 and ends on the last day of the 12th month following the compliance date. The initial compliance period extends through January, 2007 plus the next 12 months. The initial compliance demonstration includes the calculations according to (2) and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the emission limit in Condition 1.a.(1), and that you used no thinners or other additives, or cleaning materials that contained organic HAP as determined according to (2)(a).</p> <p>[s. NR 465.46(1), Wis. Adm. Code; 40 CFR 63.3940]</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart MMMM]**

CONDITION TYPE	a. CONDITIONS
6. Compliance Requirements for the Compliant Material Option (Continued)	<p>(2) You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source or for all the coating operations in the affected source. You shall use either the emission rate without add-on controls option in Condition 2.a.(3) for any coating operation in the affected source for which you do not use the compliant material option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations may not use any coating with an organic HAP content that exceeds the emission limit in Condition 1.a.(1) and shall use no thinner or other additive, or cleaning material that contains organic HAP as determined according to (a) to (d). Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in s. NR 465.43 (3) and (4). You shall conduct a separate initial compliance demonstration for each general use, high performance, magnet wire, rubber-to-metal and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit under Condition 2.a.(4). If you are demonstrating compliance with a predominant activity or facility-specific emission limit, you shall demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You shall meet all the requirements of this section. You shall use the procedures in (a) to (d) on each coating, thinner, other additive and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to re-determine the organic HAP content of coatings, thinners, other additives and cleaning materials that are reclaimed on-site, or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site, and reused in the coating operation or operations for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.</p> <p>(a) <i>Determine the mass fraction of organic HAP for each material used.</i> You shall determine the mass fraction of organic HAP for each coating, thinner and other additive, and cleaning material used during the compliance period by using one of the following 5 options:</p> <p>(i) <i>'Method 311.'</i> You may use Method 311 in 40 CFR part 63, Appendix A, for determining the mass fraction of organic HAP. You shall use the procedures specified in (A) and (B) when performing a Method 311 test.</p> <p>(A) Count each organic HAP that is measured to be present at 0.1% by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0% by mass or more for other compounds. Express the mass fraction of each organic HAP you count as a value truncated to 4 places after the decimal point.</p> <p>(B) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to 3 places after the decimal point.</p> <p>(ii) <i>'Method 24.'</i> For coatings, you may use Method 24 in 40 CFR part 60, Appendix A, to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in 40 CFR part 63, Subpart PAPP Appendix A, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in 40 CFR part 63, Subpart PAPP, Appendix A as a substitute for the mass fraction of organic HAP.</p> <p>(iii) <i>'Alternative method.'</i> You may use an alternative test method for determining the mass fraction of organic HAP once the administrator has approved it. You shall follow the procedure in s. NR 460.06 (5) to submit an alternative test method for approval.</p> <p>(iv) <i>'Information from the supplier or manufacturer of the material.'</i> You may rely on information other than that generated by the test methods specified in (i) to (iii), such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1% by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0% by mass or more for other compounds. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile</p> <p style="text-align: center;">(Continued on Next Page)</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
6. Compliance Requirements for the Compliant Material Option (Continued)	<p>(2)(a)(iv) Continued</p> <p>matter mass fraction content. If there is a disagreement between the manufacturer's data and results of a test conducted according to (i) to (iii), then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the department that the formulation data are correct.</p> <p>(v) <i>'Solvent blends.'</i> Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which shall be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 2 or 3 of ch. NR 465, Subchapter V, Wis. Adm. Code. If you use the tables, you shall use the values in Table 2 for all solvent blends that match Table 2 entries according to the instructions for Table 2, and you may use Table 3 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 2 and you know only whether the blend is aliphatic or aromatic. However, if the results of a test using Method 311 in 40 CFR part 63, Appendix A, indicates higher values than those listed on Table 2 or 3, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the department that the formulation data are correct.</p> <p>(b) <i>Determine the volume fraction of coating solids for each coating.</i> You shall determine the volume fraction of coating solids, in liters (gallons) of coating solids per liter (gallon) of coating, for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in (i) to (iv). If test results obtained according to (i) do not agree with the information obtained under (iii) or (iv), the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the department that the formulation data are correct.</p> <p>(i) <i>ASTM D2697-86 (1998) or ASTM D6093-97 (2003).</i> You may use ASTM D2697-86 (1998) "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings", or ASTM D6093-97 (2003) "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer", to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.</p> <p>(ii) <i>Alternative method'</i> You may use an alternative test method for determining the solids content of each coating once the administrator has approved it. You shall follow the procedure in s. NR 460.06(5) to submit an alternative test method for approval.</p> <p>(iii) <i>Information from the supplier or manufacturer of the material'</i> You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.</p> <p>(iv) <i>Calculation of volume fraction of coating solids'</i> You may determine the volume fraction of coating solids using the following equation:</p> $V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Equation 1})$ <p>where:</p> <p>V_s is the volume fraction of coating solids, liters (gallons) of coating solids per liter (gallon) of coating.</p> <p>$m_{\text{volatiles}}$ is the total volatile matter content of the coating, including HAP, volatile organic compounds, water and exempt compounds, determined according to Method 24 in 40 CFR part 60, Appendix A, grams (lb) of volatile matter per liter (gallon) of coating.</p> <p>D_{avg} is the average density of volatile matter in the coating, grams (lb) of volatile matter per liter (gallon) of volatile matter, determined from test results using ASTM D1475-98 (2003) "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products", information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 (2003) test results and other information sources, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the department that the formulation data are correct.</p> <p style="text-align: center;">[Continued on Next Page]</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
6. Compliance Requirements for the Compliant Material Option (Continued)	<p>(2) Continued</p> <p>(c) <i>Determine the density of each coating.</i> Determine the density of each coating used during the compliance period from test results using ASTM D1475–98 (2003) “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products”, information from the supplier or manufacturer of the material, or specific gravity data for pure chemicals. If there is disagreement between ASTM D1475–98 (2003) test results and the supplier’s or manufacturer’s information, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the department that the formulation data are correct.</p> <p>(d) <i>Determine the organic HAP content of each coating.</i> Calculate the organic HAP content of each coating used during the compliance period using the following equation:</p> $H_c = \frac{(D_c)(W_c)}{V_s} \quad (\text{Equation 2})$ <p>where:</p> <p>H_c is the organic HAP content of the coating, kg (lb) of organic HAP emitted per liter (gallon) of coating solids used.</p> <p>D_c is the density of coating, kg (lb) of coating per liter (gallon) of coating, determined according to (c).</p> <p>W_c is the mass fraction of organic HAP in the coating, kg (lb) of organic HAP per kg (lb) of coating, determined according to (a).</p> <p>V_s is the volume fraction of coating solids, liter (gallon) of coating solids per liter (gallon) of coating, determined according to (b).</p> <p>(e) <i>Compliance demonstration.</i> The calculated organic HAP content for each coating used during the initial compliance period shall be less than or equal to the emission limit in Condition 1.a.(1); and each thinner and other additive, and cleaning material used during the initial compliance period shall contain no organic HAP, determined according to (a). You shall keep all records required by Conditions 5.</p> <p>[s. NR 465.46(2), Wis. Adm. Code; 40 CFR 63.3941]</p> <p>(3)(a) For each compliance period, to demonstrate continuous compliance, you shall use no coating for which the organic HAP content, determined using Equation 2 of (2)(d), exceeds the emission limit in Condition 1.a.(1), and use no thinner or other additive, or cleaning material that contains organic HAP, determined according to (2)(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in (1), is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under Condition 2.a.(4), you shall also perform the calculation using Equation 1 of s. NR 465.43(1)(c)2. on a monthly basis using the data from the previous 12 months of operation.</p> <p>(b) If you choose to comply with the emission limits in Condition 1.a.(1) by using the compliant material option, the use of any coating, thinner or other additive, or cleaning material that does not meet the criteria specified in (a) is a deviation from the emission limits in Condition 1.a.(1) that shall be reported as specified in Condition 4.a.(1)(e).</p> <p>(c) As part of each semiannual compliance report required by Condition 4.a.(1), you shall identify the coating operations for which you used the compliant material option. If there were no deviations from the emission limit in Condition 1.a.(1), submit a statement that the coating operations were in compliance with the emission limits during the reporting period because you used no coatings for which the organic HAP content exceeded the emission limit in Condition 1.a.(1), and you used no thinner, other additive or cleaning material that contained organic HAP, determined according to (2)(a).</p> <p>(d) You shall maintain records as specified in Condition 5.</p> <p>[s. NR 465.46(3), Wis. Adm. Code; 40 CFR 63.3942]</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
7. Compliance Requirements for the Emission Rate without Add-on Controls Option	<p>(1) You shall complete the initial compliance demonstration for the initial compliance period according to the requirements of (2). The initial compliance period begins on January 2, 2007 and ends on the last day of the 12th month following the compliance date. The initial compliance period extends through the end of that month plus the next 12 months. You shall determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to (2) and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the emission limit in Condition 1.a.(1). [s. NR 465.47(1), Wis. Adm. Code; 40 CFR 63.3950]</p> <p>(2) You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You shall use the compliant material option in Condition 2.a.(2) for any coating operation in the affected source for which you do not use the emission rate without add-on controls option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations shall meet the emission limit in Condition 1.a.(1), but is not required to meet the operating limits or work practice standards in s. NR 465.43 (3) and (4). If you are demonstrating compliance with a predominant activity or facility-specific emission limit, you shall demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You shall meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners or other additives, or cleaning materials used on coating operations for which you use the compliant material option in Condition 2.a.(2). You do not need to redetermine the mass of organic HAP in coatings, thinners or other additives, or cleaning materials that have been reclaimed on-site, or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site, and reused in the coating operation or operations for which you use the emission rate without add-on controls option. If you use coatings, thinners or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.</p> <p>(a) <i>Determine the mass fraction of organic HAP for each material.</i> Determine the mass fraction of organic HAP for each coating, thinner and other additive, and cleaning material used during each month according to the requirements in Condition 6.a.(2)(a).</p> <p>(b) <i>Determine the volume fraction of coating solids.</i> Determine the volume fraction of coating solids, in liters (gallons) of coating solids per liter (gallon) of coating, for each coating used during each month according to the requirements in Condition 6.a.(2)(b).</p> <p>(c) <i>Determine the density of each material.</i> Determine the density of each liquid coating, thinner or other additive, and cleaning material used during each month from test results using ASTM D1475-98 (2003), "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products", information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM D5965-02 "Standard Test Methods for Specific Gravity of Coating Powders", or information from the supplier. If there is disagreement between ASTM Method D1475-98 (2003) or ASTM Method D5965-02 test results and other information sources, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the department that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C and 2 of this section.</p> <p>(d) <i>Determine the volume of each material used.</i> Determine the volume, in liters or gallons, of each coating, thinner and other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C of this section.</p> <p style="text-align: right;">(Continued on Next Page)</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
7. Compliance Requirements for the Emission Rate without Add-on Controls Option (Continued)	<p>(2) Continued</p> <p>(e) <i>Calculate the mass of organic HAP emissions.</i></p> <p>(i) The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using the following equations and the procedures in (ii) if applicable:</p> <p>Calculate the mass of organic HAP emissions using Equation 1:</p> $H_e = A + B + C - R_w \quad (\text{Equation 1})$ <p>where:</p> <p>H_e is the total mass of organic HAP emissions during the month, kg (lb).</p> <p>A is the total mass of organic HAP in the coatings used during the month, kg (lb), as calculated in Equation 1A of this section.</p> <p>B is the total mass of organic HAP in the thinners and other additives used during the month, kg (lb), as calculated in Equation 1B of this section.</p> <p>C is the total mass of organic HAP in the cleaning materials used during the month, kg (lb), as calculated in Equation 1C of this section.</p> <p>R_w is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg (lb), determined according to (ii). You may assign a value of zero to R_w if you do not wish to use this allowance.</p> <p>Calculate the kg (lb) organic HAP in the coatings used during the month using Equation 1A:</p> $A = \sum_{i=1}^m (\text{Vol}_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Equation 1A})$ <p>where:</p> <p>A is the total mass of organic HAP in the coatings used during the month, in kg (lb).</p> <p>$\text{Vol}_{c,i}$ is the total volume of coating, i, used during the month, in liters (gallons).</p> <p>$D_{c,i}$ is the density of coating, i, kg (lb) of coating per liter (gallon) of coating.</p> <p>$W_{c,i}$ is the mass fraction of organic HAP in coating, i, kg (lb) of organic HAP per kg (lb) of coating. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in 40 CFR part 63, Subpart Pppp, Appendix A.</p> <p>m is the number of different coatings used during the month.</p> <p>Calculate the kg (lb) of organic HAP in the thinners and/or other additives used during the month using Equation 1B:</p> $B = \sum_{j=1}^n (\text{Vol}_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Equation 1B})$ <p>(Continued on Next Page)</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
7. Compliance Requirements for the Emission Rate without Add-on Controls Option (Continued)	<p>(2)(e)(i) [Continued]</p> <p>where:</p> <p>B is the total mass of organic HAP in the thinners and other additives used during the month, in kg (lb).</p> <p>Vol_{t,j} is the total volume of thinner or other additive, j, used during the month, in liters (gallons).</p> <p>D_{t,j} is the density of thinner or other additive, j, kg per liter (lb per gallon).</p> <p>W_{t,j} is the mass fraction of organic HAP in thinner or other additive, j, kg (lb) of organic HAP per kg (lb) of thinner or other additive. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in 40 CFR part 63, Subpart PPPP, Appendix A.</p> <p>n = is the number of different thinners and other additives used during the month.</p> <p>Calculate the kg (lb) organic HAP in the cleaning materials used during the month using Equation 1C:</p> $C = \sum_{k=1}^p (\text{Vol}_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Equation 1C})$ <p>where:</p> <p>C is the total mass of organic HAP in the cleaning materials used during the month, in kg (lb).</p> <p>Vol_{s,k} is the total volume of cleaning material, k, used during the month, in liters (gallons).</p> <p>D_{s,k} is the density of cleaning material, k, kg per liter (lb per gallon).</p> <p>Ws,k is the mass fraction of organic HAP in cleaning material, k, kg (lb) of organic HAP per kg (lb) of material</p> <p>p is the number of different cleaning materials used during the month.</p> <p>(ii) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then you shall determine the mass according to (A) to (D):</p> <p>(A) You may only include waste materials in the determination that are generated by coating operations in the affected source for which you use Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265 or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.</p> <p>(B) You shall determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month.</p> <p>(C) Determine the total mass of organic HAP contained in the waste materials specified in (B).</p> <p>(D) You shall document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in Condition 5.a.(1)(h). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.</p> <p>(f) <i>Calculate the total volume of coating solids used.</i> Determine the total volume of coating solids used, liters (gallons), which is the combined volume of coating solids for all the coatings used during each month, using the following equation:</p> $V_{st} = \sum_{i=1}^m (\text{Vol}_{c,i})(V_{s,i}) \quad (\text{Equation 2})$ <p>(Continued on Next Page)</p>

E. Existing Surface Coating Operations (Processes P33, P34 and P37)**National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Miscellaneous Metal Parts and Products [Chapter NR 465, Subchapter V, Wisconsin Administrative Code, and 40 CFR 63, Subpart Mmmm]**

CONDITION TYPE	a. CONDITIONS
7. Compliance Requirements for the Emission Rate without Add-on Controls Option (Continued)	<p>(2) Continued</p> <p>where:</p> <p>V_{st} is the total volume of coating solids used during the month, liters (gallons).</p> <p>$Vol_{c,i}$ is the total volume of coating i, used during the month, liters (gallons).</p> <p>$V_{s,i}$ is the volume fraction of coating solids for coating i, liters (gallons) of solids per liter (gallon) of coating, determined according to Condition 6.a.(2)(b)</p> <p>m is the number of coatings used during the month.</p> <p>(g) <i>Calculate the organic HAP emission rate.</i> Calculate the organic HAP emission rate for the compliance period using the following equation:</p> $H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad \text{(Equation 3)}$ <p>where:</p> <p>H_{yr} is the average organic HAP emission rate for the compliance period, kg (lb) of organic HAP emitted per liter (gallon) of coating solids used.</p> <p>H_e is the total mass of organic HAP emissions from all materials used during month y, kg (lb), as calculated by Equation 1 of this section.</p> <p>V_{st} is the total volume of coating solids used during month y, liters (gallons), as calculated by Equation 2 of this section.</p> <p>y is the number of the month in the compliance period.</p> <p>n is the number of full or partial months in the compliance period. For the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13. For all following compliance periods, n equals 12.</p> <p>(h) <i>Compliance demonstration.</i> The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section shall be less than or equal to the emission limit in Condition 1.a.(1). You shall keep all records as required by Condition 5.</p> <p>[s. NR 465.47(2), Wis. Adm. Code; 40 CFR 63.3951]</p> <p>(3)(a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to (2)(a) to (g), shall be less than or equal to the emission limit in Condition 1.a.(1). A compliance period consists of 12 months. Each month after the end of the initial compliance period described in (1) is the end of a compliance period consisting of that month and the preceding 11 months. You shall perform the calculations in (2)(a) to (g) on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under Condition 2.a.(4), you shall also perform the calculation using Equation 1 in s. NR 465.43 (1) (c) 2. on a monthly basis using the data from the previous 12 months of operation.</p> <p>(b) If the organic HAP emission rate for any 12-month compliance period exceeded the emission limit in Condition 1.a.(1), this is a deviation from the emission limit for that compliance period and shall be reported as specified in Condition 4.a.(1)(f).</p> <p>(c) As part of each semiannual compliance report required by Condition 4., you shall identify the coating operations for which you used the emission rate without add-on controls option. If there were no deviations from the emission limit in Condition 1.a.(1), you shall submit a statement that the coating operations were in compliance with the emission limits during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the emission limit in Condition 1.a.(1), determined according to (2)(a) to (g).</p> <p>(d) You shall maintain records as specified in Condition 5.</p> <p>[s. NR 465.47(3), Wis. Adm. Code; 40 CFR 63.3952]</p>

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Record-keeping and Monitoring Requirements
1. State Hazardous Air Pollutants (State HAPs)	(1) No owner or operator of a source may cause, allow or permit emissions of a hazardous air contaminant listed in Table A of s. NR 445.07, Wis. Adm. Code, in such quantity or concentration or for such duration as to cause an ambient air concentration of the contaminant off the source property that exceeds the concentration in column (g) of Table A for the contaminant. [s. NR 445.07(1)(a), Wis. Adm. Code]*	(1) The permittee shall only burn Group 1 virgin fossil fuels (Natural gas, propane, distillate #2 and diesel fuel oil) when firing any fuel combustion sources. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]* (2) When the permittee elects to significantly change the existing operation (e.g., raw material or product change or production capacity increase), the permittee shall determine, either analytically or through the use of technical calculations, the facility's new or increased potential emissions of any state hazardous air pollutant (State HAP) emitted, assuming maximum operation conditions. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]* (3) The permittee shall determine if the facility's new or increased potential emission rate of any State HAP exceeds the applicable published de minimus value in Table A of s. NR 445.07, Wis. Adm. Code. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]* (4) When the facility's new or increased potential emission rate of any State HAP exceeds a published de minimus value, the permittee shall evaluate the impact of the pollutant's emission and determine if any additional action needs to be taken to protect the ambient air quality standard. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]*	(1) When any hazardous air pollutant concentration or emission rate testing of any material is required for demonstrating compliance, the permittee shall use a test method and testing protocol approved by either the US EPA or the Department. [ss. NR 407.09(1)(c)1.a. and 4(a)1. and NR 439.06(8), Wis. Adm. Code] (2) Recordkeeping and monitoring are not required for any applicable requirement where the facility does not have the potential to violate the emission limitations under normal operating conditions. The facility does not presently have the potential to emit, under normal operation conditions, any State HAP at an emission rate that has been determined to be injurious. [ss. 285.65(3) and 285.63(4)(b), Wis. Stats.]*
2. Malfunction Prevention and Abatement Plan ⁵	(1) A malfunction prevention and abatement plan shall be prepared and followed for the plant. [s. NR 439.11, Wis. Adm. Code] (2) All air pollution control equipment shall be	(1) The malfunction prevention and abatement plan shall be developed to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emissions limitation to be violated or which may cause air pollution. [s. NR 439.11(1), Wis. Adm. Code] (2) This malfunction prevention and abatement plan shall include	None Applicable.

⁵ The facility malfunction prevention and abatement plan was last updated and/or revised in December 2012. Under s. NR 439.11(1), Wis. Adm. Code, the facility's plan needs to be updated or revised no later than December 2017.

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Record-keeping and Monitoring Requirements
	<p>operated and maintained in conformance with good engineering practices (i.e. operated and maintained according to manufacturer's specifications and directions) to minimize the possibility for the exceedance of any emission limitations. [s. NR 439.11(4), Wis. Adm. Code]</p> <p>(3) The facility shall submit the plan to the Wisconsin Department of Natural Resources for review. The department may amend the plan if deemed necessary for malfunction prevention or for the reduction of excess emissions during malfunctions. [s. NR 439.11(2), Wis. Adm. Code]</p>	<p>installation, maintenance and routine calibration procedures for the process monitoring and control equipment instrumentation. This plan shall require an instrumentation calibration at the frequency specified by the manufacturer, yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. Inspection and calibration shall also be conducted whenever instrumentation anomalies are noted. [ss. NR 407.09(1)(c)1.c., NR 439.055(4) and s. NR 439.11, Wis. Adm. Code]</p> <p>(3) The malfunction prevention and abatement plan shall require a copy of the operation and maintenance manual for the control equipment to be maintained on site. The plan shall contain all of the elements in s. NR 439.11(1)(a) – (h), Wis. Adm. Code. [s. NR 439.11, Wis. Adm. Code]</p>	
3. Stack Testing Requirements	<p>(1) If any required compliance emission test(s) cannot be conducted within the time frames specified in this permit, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). [s. NR 439.07, Wis. Adm. Code]</p> <p>(2) All testing shall be performed with the emissions unit operating at capacity or as close to capacity as practicable and in accordance with approved procedures. If operation at capacity is not feasible, the source shall operate at a capacity level which is approved by the Department in writing. [s. NR 439.07(1), Wis. Adm. Code]</p> <p>(3) The Department shall be informed at least 20 working days prior to any stack testing,</p>	<p>(1) Two copies of the report on any compliance emission tests shall be submitted to the Department for evaluation within 60 days following the completion of tests. [s. NR 439.07(9), Wis. Adm. Code]</p>	None Applicable.

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Record-keeping and Monitoring Requirements
	<p>so a Department representative can witness the testing. At the time of notification, a compliance emission test plan shall also be submitted to the Department for approval. When approved in writing, an equivalent test method may be substituted for the reference test method. The notification and test plan shall be submitted to the Wisconsin Department of Natural Resources. [s. NR 439.07(2), Wis. Adm. Code]</p>		
4. Compliance Reports and Records	<p>(1) The permittee shall submit periodic monitoring reports. [s. NR 407.09(1)(c)3., Wis. Adm. Code]</p> <p>(2) The permittee shall submit periodic certification of compliance. [s. NR 407.09(4)(a)3., Wis. Adm. Code]</p> <p>(3) The records required under this permit shall be retained for at least five (5) years and shall be made available to department personnel upon request during normal business hours. [ss. NR 439.04 and NR 439.05, Wis. Adm. Code]</p>	<p>(1) The permittee shall submit a monitoring report which contains the results of monitoring or a summary of monitoring results required by this permit to the Department every six (6) months.</p> <p>(a) The time periods to be addressed by the submittal January 1 to June 30 and July 1 to December 31.</p> <p>(b) The report shall be submitted to the Wisconsin Department of Natural Resources within 45 days after the end of each reporting period.</p> <p>(c) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.</p> <p>(d) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report.</p> <p>(e) The content of the submittal is described in item D. of Part II of the operation permit.</p> <p>[ss. NR 407.09(1)(c)3. and NR 439.03(1)(b), Wis. Adm. Code]</p> <p>(2) The permittee shall submit an annual certification of compliance with the requirements of this permit to the Wisconsin Department of Natural Resources and to Compliance Data – Wisconsin, Air and Radiation Division, US EPA, 77 W. Jackson Street, Chicago, IL 60604.</p> <p>(a) The time period to be addressed by the report is January 1 to December 31 of the preceding year.</p> <p>(b) The report shall be submitted to the Wisconsin Department of Natural Resources and the US EPA within 45 days after the end of each reporting period.</p>	

ZZZ. Conditions Applicable to the Entire Facility.

Condition Type	a. Limitations	b. Compliance Demonstration	c. Reference Test Methods, Record-keeping and Monitoring Requirements
		(c) The information included in the report shall comply with the requirements of Part II, Section N of this permit. (d) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [ss. NR 407.09(4)(a)3. and NR 439.03(1)(c), Wis. Adm. Code]	